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STATISTICAL ANALYSIS SYSTEM

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Brown T.

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AMENDMENT

707 Wilshire Blvd., Los Angeles, CA 90017

February 26, 1997

Assistant Commissioner for Patents Washington, DC 20231

sir:

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In response to the Office Action dated November 26, 1996, please amend the above-identified application as follows:

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D. C. 20231.

Date: February 26, 1997

Connie Kwon

200 TL 03/26/97 08476662 240,00 CK 1 102

1 103 1.210.00 CK

IN THE CLAIMS:

Please amend claims 29, 32-33, 37, 39, 41-42, 44, 46, 50-51, 55-56, 58, 63, 68-70, 79, 82, 88, 91, 96-98, 102, 110, 119, 122, 126, 128, 130-135, 137-138, 141-143, 148-151, 155-158, 164, and 166, and cancel claims 80 and 81, without prejudice.

operations of an interface with a communication facility, said process including the steps of:

providing products carrying participation numbers specifying limits on use to entitle individual callers to access said operations of said interface with said communication facility;

coupling remote terminals to said interface for providing voice signals to said individual callers as to provide vocal operating instructions to said individual callers;

receiving digital identification data from said individual callers responsive to said voice signals including said participation numbers for said individual callers and answer data provided from said remote terminals under control of said individual callers;

qualifying said individual callers by testing to determine if said individual callers are entitled to access said operations of the interface based on said limits on use

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specified by said participation numbers for said individual callers and accordingly providing approval signals for qualified individual callers;

accessing a memory with said participation numbers for said individual callers and storing data relating to calls from said individual callers; and

processing at least certain of said answer data responsive to said approval signals to isolate a subset of said individual callers.

1 432. (Twice Amended) A process according to claim 29,
2 wherein said communication facility automatically provides called
3 terminal digital data (DNIS) to identify a specific format from a
2 plurality of formats for executing operations of said interface.

(Amended) A process according to claim [29] 32, wherein said communication facility also automatically provides calling terminal digital data to identify said remote terminals.

837. (Amended) An analysis control system for use with a communication facility including remote terminals for individual callers, wherein said remote terminals may comprise a conventional telephone instrument including voice communication means, and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

an interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication, and including means to provide caller data signals representative of data relating to said individual callers developed by said remote terminals and means to receive calling terminal digital data automatically provided by said communication facility;

voice generator structure coupled through said
interface structure for actuating said remote terminals as
to provide vocal operating instructions to said individual
callers;

record structure, including memory and control means, connected to receive said caller data signals from said interface structure for accessing a file and storing digital data relating to said individual callers provided from said digital input means through said interface structure to store designations of said individual callers including representations indicative of [the] a calling order sequence of said individual callers, said record structure also including a database of stored calling terminal digital data; and

qualification structure controlled by said record structure for restricting the extent of access to said system by said individual callers based on a comparison of said calling terminal digital data against said database of stored calling terminal digital data.

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(Twice Amended) An analysis control system according to claim [38] 37, wherein said calling order sequence is indicative of caller transaction data.

(Three Times Amended) An analysis system for use with a communication facility including remote terminal apparatus for individual callers, wherein said remote terminal apparatus may comprise a conventional telephone instrument including voice communication means, and digital input means in the form of an array of alphabetic numeric buttons for providing [identification and] caller data including answer data, said analysis system comprising:

interface means selectively coupled to said communication facility to interface said remote terminal apparatus for voice and digital communication and including means to provide signals values from data developed by said remote terminal apparatus;

voice generator means selectively coupled through said interface means to said remote terminal apparatus for providing vocal operating instructions to said individual callers;

designation means selectively coupled to said interface means for assigning individual designations to said individual callers; and





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processing means for [providing] processing at least certain of said answer data, and storage means for registering said [processing] answer data, said processing means for isolating a subset of said individual callers based on repeated comparisons of said [processing] answer data that is registered against said [processing] answer data being provided by said individual callers including data associated with said individual callers.

(Amended) An analysis control system according to claim AI, wherein said designation means includes means for storing sequence data indicative of [the] a calling sequence of said individual callers.

1 15 44. (Amended) An analysis control system according to claim 41, wherein said processing means processes said

3 [processing] answer data that is registered in combination with said [identification and] answer data being provided by said individual callers.

(Amended) An analysis control system according to claim 45, wherein said operator enters at least certain of said [processing] answer data for said certain of said individual callers.

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with a communication facility including remote terminals for individual callers, wherein each of said remote terminals may comprise a conventional telephone instrument including voice communication means and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication and including means to provide signals representative of data developed by said remote terminals and including means to automatically receive called number identification signals (DNIS) to identify one of a plurality of different called numbers;

voice generator structure coupled through said interface structure for actuating said remote terminals as to provide vocal operating instructions to specific ones of said individual callers;

record means, including memory and control means, connected to said interface structure for accessing a file and storing data relating to said individual callers;

designation means coupled to said interface structure and said record means for assigning individual designations to said individual callers and storing said designations in said record means as part of said data relating to said individual callers; and

encoding means coupled to said record means and said

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designation means for encoding at least certain of said data relating to [calls from] said individual callers.

51. (Twice Amended) An analysis control system according to claim 50, wherein said designation means includes means for storing representations of other data provided by [said] a caller including caller PIN number data.

1 26.55. (Twice Amended) An analysis control system according to claim 50, wherein said [designation] record means includes

means for storing customer number data which is tested to

 $\frac{\sqrt{10}}{2}$ determine if said customer number data indicates negative or

5 acanceled status.

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Twice Amended) An analysis control system for use with a communication facility including remote terminals for individual callers, wherein said remote terminals may comprise a conventional telephone instrument including voice communication means, and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication, and including means to provide caller data signals representative of data relating to said individual callers developed by said remote terminals and

including means to [automatically] receive called number

identification signals (DNIS) automatically provided by said

communication facility to identify a select one of a

plurality of different called numbers associated with a

select format of a plurality of different formats;

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record structure, including memory and control means, n

connected to receive said caller data signals from said

interface structure for accessing a file and storing certain

of said data developed by said remote terminals relating to

certain select ones of said individual callers; [and]

qualification structure coupled to said record structure for qualifying access by said individual callers to said select format based on at least two forms of distinct identification including caller customer number data and at least one other distinct identification data element consisting of personal identification data provided by a respective one of said individual callers; and

switching structure coupled to said interface structure for switching certain select ones of said individual callers at said remote terminals to any one of a plurality of live operators wherein said live operators can enter at least a portion of said caller data relating to said select ones of said individual callers through interface terminals, which is stored in said record structure.

58. (Amended) An analysis control system according to



claim 57, wherein said caller data signals further include signals indicative of credit card expiration date data.

1 3465. (Amended) An analysis control system according to claim 56, wherein at least one distinct identification is provided by said individual callers on-line and [at least one of said two forms] is stored in said record structure for subsequent use.

1 3968. (Twice Amended) An analysis control system according
2 to claim [67] 56, wherein at least one of said at least two forms
3 of distinct identification includes social security number data.

(Amended) An analysis control system according to 27 claim [67] 56, wherein at least one of said at least two forms of distinct identification includes caller PIN number data.

1 4/20. (Amended) An analysis control system according to claim [67] 56, wherein at least [said] one other [of said]

distinct identification data comprises initials data.

1 49 75. (Twice Amended) An analysis control system according
2 to claim 56, wherein said caller customer number is verified

against a record of qualified customer numbers and said personal identification data is provided on-line by said individual

callers and [is] stored in said record structure for subsequent

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use.

1 50 82. (Amended) A system according to claim 56, wherein said qualification structure further executes a test for unacceptable customer numbers based upon data developed by said remote terminals indicative of said caller customer numbers.

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(Twice Amended) An analysis control system according to claim 56, wherein said select format is identified by said one [or more] of said plurality of different called numbers and is a

- distinct operating process merchandising format for processing
- 5 [with] of a customer's interactive order.

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5997. (Amended) An analysis control system according to claim 50, wherein said qualification structure testing for credit

- $\frac{\Box}{\Box}$ further tests by scoring the instant transaction for credit
- 4 approval.

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(Twice Amended) An analysis control system according to claim [94] 95, wherein said personal identification data element is provided on-line for said individual callers and is stored in said record structure for subsequent use.

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- $^{\ell 5}$ $^{\circ}$ (Twice Amended) An analysis control system for use
- with a communication facility including remote terminals for
- 3 individual callers, wherein each of said remote terminals may





comprise a conventional telephone instrument including voice communication means, and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

an interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication, and including means to provide caller data signals representative of data relating to said individual callers developed by said remote terminals and including means to automatically receive called number identification signals (DNIS) to identify a select format from a plurality of formats;

voice generator structure coupled through said interface structure for actuating said remote terminals as to provide voice operating instructions to said individual callers;

record structure, including memory and control means, n
connected to receive said caller data signals from said
interface structure for accessing a file and storing digital
caller data relating to said individual callers provided
from said digital input means through said interface
structure; and

qualification structure for testing caller data signals provided by at least one of said individual callers to specify a consumable participation key, said consumable participation key for use during a single predetermined



period of time for restricting the extent of access to at least a portion of said system by said one of said individual callers on the basis of entitlement.

A c (Amended) An analysis control system according to US

2 claim 97, wherein said caller data signals [compare] represent a

3 plurality of data elements for identifying a caller or a caller

4 transaction or both.

1 102. (Twice Amended) A process according to claim 100,68

wherein said qualifying step <u>further</u> limits access by said

individual callers to a predetermined [interval] period of time

on the basis of entitlement.

1 78 140. (Amended) A process according to claim 709, wherein 29 at least a part of said calling number identification data is 3 Jutilized in said processing step to test for excess use with 4 Drespect to said specific operating format.

1 8 129. (Twice Amended) A process for controlling operations
2 of the interface with a telephone communication system, said
3 process including the steps of:

providing products carrying participation numbers concealed within the packaging of said products, said participation numbers specifying limits on use to entitle individual callers to access said operations of the

8 H interface with said telephone communication system; and 9 coupling remote terminals to said interface for 10 providing voice signals to said individual callers and generating said voice signals for actuating said remote 11 terminals as to provide vocal operating instructions to 12 specific ones of said individual callers; 13 receiving digital identification data from said 14 individual callers responsive to said voice signals 15 including said participation numbers for said individual 16 callers and answer data provided from said remote terminals 17 under control of said individual callers; 18 qualifying said individual callers by testing to 19 determine if said individual callers are entitled to access 20 said operations of the interface based on said limits on use 21 specified by said participation numbers for said individual callers and accordingly approving qualified individual callers: accessing a memory with said participation numbers for 25 said individual callers and storing data relating to calls 26 from said individual callers: 27 processing at least certain of said answer data 28 responsive to approving said qualified individual callers; 29H receiving calling number identification signals from 30 said telephone communication facility for said individual 31份 callers and utilizing at least part of said calling number 32 identification signals in said processing step. 33

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wherein said step of qualifying further restricts the extent of access during a predetermined period of time to at least a portion of said system on the basis of entitlement.

1 94126. (Twice Amended) An analysis control system according
2 to claim 125, further comprising:

a plurality of call distributors located at different geographic locations wherein called number identification signals (DNIS) to identify said plurality of called numbers are received at said interface structure through said plurality of call distributors wherein said communication facility further comprises:

call allocation routing capability to window said individual callers to specific ones of said plurality of call distributors.

96128. (Twice Amended) An analysis control system for use with a communication facility including remote terminals for individual callers, wherein each of said remote terminals may comprise a conventional telephone instrument including voice communication means, and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

an interface structure coupled to said communication



facility to interface said remote terminals for voice and digital communication, and including means to receive answer data signals provided by said individual callers from said remote terminals wherein said communication facility automatically provides called number identification data signals indicating a called number (DNIS) dialed by an individual caller and said called number [(DNIS)] is one of a plurality of called numbers;

voice generator structure coupled through said interface structure for actuating said remote terminals as to provide vocal operating instructions to said individual callers:

record structure including memory and control means for storing answer data signals and for receiving identification data signals for specific of said individual callers, said record structure further including means for receiving additional identification data signals on-line for said specific of said individual callers and for storing said additional identification data signals in said record structure for subsequent identification of said individual callers; [and]

means for processing at least certain of said answer data signals relating to select ones of said individual callers:

qualification structure for verifying said identification data signals for specific of said individual

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callers against a file of stored identification data.

1 98130. (Twice Amended) An analysis control system according 96
2 to claim 128, wherein said identification data signals
3 [comprises] comprise caller customer number data.

1 237. (Twice Amended) An analysis control system according 18 2 to claim 130, wherein said additional identification data signals [comprises] comprise at least one of caller PIN number data, 2 caller initials data, social security number data, 3 or caller 2 telephone number data.

132. (Amended) An analysis control system according to 9% claim 130, wherein [said caller customer number data comprises] calling number identification data automatically provided by said communication facility is indicative of said caller customer number data.

(Amended) An analysis control system, according to 96 claim 128, wherein said identification data signals include data indicative of caller customer number data and said additional data signals are indicative of caller social security number data.

1 234. (Twice Amended) An analysis control system, according 160 2 to claim [133] 132, wherein said additional identification data

3 signals are indicative of caller PIN number data.

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1 \$\frac{1}{25}\$. (Twice Amended) An analysis control system according | 0 | 2 to claim 133, further comprising:

3 <u>a plurality of</u>

a plurality of call distributors located at different geographic locations wherein called number identification signals (DNIS) to indicate said plurality of said called numbers are received at said interface structure through said plurality of call distributors wherein said communication facility further comprises:

9 10*H* 11*H*

call allocation routing capability to window said individual callers to specific ones of said plurality of call distributors.

1 105137. (Twice Amended) An analysis control system according
2 to claim 136, wherein said computer generated number data [are]
3 is provided in a chronological order to said individual callers
4 during a data acquisition phase.

1 138. (Twice Amended) An analysis control system according 96 to claim 128, wherein said one of a plurality of called numbers identifies one of a plurality of distinct operating formats.

(Twice Amended) An analysis control system for use with a communication facility including remote terminals for individual callers, wherein each of said remote terminals may

comprise a conventional telephone instrument including voice communication means and digital input means in the form of an array of alphabetic numeric buttons for providing data, said analysis control system comprising:

interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication and including means to provide signals representative of data developed by said remote terminals;

voice generator structure selectively coupled through said interface structure to said remote terminals for providing vocal operating instructions to individual ones of said individual callers;

record memory connected to said interface structure for accessing a file and storing data relating to certain select ones of said individual callers including voice data and digital data developed by said remote terminals;

qualification structure for qualifying said individual callers by testing to determine if at least certain of said individual callers are entitled to access a processing [formats] format of said analysis [structure] control system;

structure selectively coupled to said interface
structure and said record memory for providing computer
generated numbers to said individual callers and storing
said computer generated numbers in said record memory; and
analysis structure connected to said record memory for

processing at least certain of said data relating to certain select ones of said individual callers; and

means to control processing formats of said analysis
[structure] control system in accordance with signals
automatically provided by said communication facility
indicative of a respective one of a plurality of called
numbers (DNIS) for a respective one of said processing
formats.

(Amended) An analysis control system according to 109 claim 141, wherein said signals representative of data include credit card or participation number data.

1 143. (Amended) An analysis control system according to 1/0 wherein said credit card or participation number data is 2 verified.

1 15 148. (Twice Amended) An analysis control system according 1/3 to claim [147] 146, wherein said [physical characteristic]

3 personal information data includes age data.

(Twice Amended) An analysis control system for use with a communication facility including remote terminals for individual callers, wherein each of said remote terminals may comprise a conventional telephone instrument including voice communication means and digital input means in the form of an





array of alphabetic numeric buttons for providing data and wherein said communication facility has a capability to provide called number identification data (DNIS) and calling number identification data, said analysis control system comprising:

multiple automatic call distributors at geographically

multiple automatic call distributors at geographically distinct locations for receiving calls from said individual callers at said remote terminals;

interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication and including means to receive caller data signals representative of data relating to said individual callers, including caller personal identification data and said called number identification data signals (DNIS) and said calling number identification data provided automatically by said communication facility, said called number identification data signals (DNIS) identifying a select format from a plurality of formats;

voice generator structure coupled through said interface structure for actuating said remote terminals as to provide vocal operating instructions in accordance with said select format to said individual callers and to prompt said individual callers to enter data;

record testing structure connected to receive and test said caller data signals including said calling number identification data and said caller personal identification data against previously stored calling number identification

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32	data and caller personal identification data; and
33	analysis structure for receiving and processing said
34	caller data signals under control of said record testing
35	structure.
1	150. (Twice Amended) An analysis control system according 116 to claim 149, wherein said communication facility further
3	comprises:
4	call allocation routing capability to window said
5 #	individual callers to specific ones of said plurality of
\$t	<u>call distributors</u> .
1	118 151. (Twice Amended) A process for controlling operations
\mathcal{I}_2	of an interface with a telephonic communication system including
HBC	remote terminals for individual callers, wherein each of said
4	Tremote terminals may comprise a conventional telephone instrument
5	including voice communication means and digital input means in
6	the form of an array of alphabetic numeric buttons for providing
7~	data and wherein said telephonic communication system has a
8	capability to automatically provide call data signals indicative
9	of calling number identification data or called number
10	identification data (DNIS) or both, said process including the
11	steps of:
12	providing products carrying participation numbers
1.3	concealed within said products specifying limits on use

relating to a dollar amount to entitle said individual

callers to access said operations of said interface with said telephonic communication system;

receiving said call data signals indicative of called number identification data including a called number (DNIS) dialed by said individual callers to select a specific operating format from a plurality of operating formats of said operations of said interface wherein at least one of said plurality of operating formats includes an automated promotional format for promoting said products;

coupling said remote terminals to said interface for providing voice signals to said individual callers and generating said voice signals for actuating said remote terminals as to provide vocal operating instructions to specific ones of said individual callers;

receiving digital identification data from said individual callers responsive to said voice signals including said participation numbers and answer data provided from said remote terminals under control of said individual callers;

qualifying said individual callers by testing to determine if said individual callers are entitled to access said operations of said interface based on said limits on use specified by said participation numbers and accordingly approving qualified individual callers;

accessing a memory with said participation numbers and storing data relating to calls from said individual callers;



41 processing at least certain of said answer data responsive to approving said qualified individual callers; 42 and 43 providing on-going accounting data to said individual 45 callers, said on-going accounting data for at least one of a plurality of intervals [is] being determined at least in part by said answer data provided by an individual caller 48 during a call and during at least one of said intervals includes real time data provided to [an] said individual 49 50 caller on-line.

1 155. (Amended) A process according to claim [151] 156,
2 further including a step of limiting access by a caller to said

3 memory under control of a clock.

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156. (Twice Amended) A process according to claim 151,
wherein said qualifying step limits access by said individual
callers to a predetermined [interval] period of time based on
entitlement.

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157. (Amended) A process according to claim 151, wherein said step for receiving [step] said call data signals further includes:

receiving calling number identification data.

1 124 158. (Amended) A process according to claim 157, wherein

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said processing step further includes processing of at least certain of said calling number identification data to test said calling number identification data to prevent excessive use.

1 130 164. (Amended) An analysis control system according to 125 claim 159, wherein [said caller data] calling number identification signals are [indicative of caller telephone number data] automatically provided by said communication facility.

1 132166. (Amended) An analysis control system according to 13/ claim [159] 165, wherein said qualification structure restricts 3 said extent of access by each of said individual callers to a 4 single use entitlement.

Please add the following new claims 179-235.

individual callers are only allowed access during a predetermined period of time.

1 H181. An analysis control system according to claim 40,
2 wherein said caller significance is indicative of a calling order
3 sequence.

	148
1	19182. An analysis control system according to claim 56,
2	wherein said interface structure further receives voice data from
3	said individual callers and stores said voice data for subsequent
4	processing. **
	148
1	71 An analysis control system according to claim 182,
2	further comprising:
3	analysis structure coupled to said record structure for
4	processing at least certain of said data developed by said
5	remote terminals relating to certain select ones of said
6	individual callers to isolate a subset of said callers.
	individual callers to isolate a subset of said callers.
1	
2/1	wherein said qualification structure further comprise test
3	structure coupled to said interface structure for testing data
3/4	provided by said individual callers specifying a limit on use
H 25	during a predetermined period of time.
•	26
1	185. An analysis control system according to claim 65,
2	wherein said one other distinct identification data is PIN number
3	data. ∤²
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1	14186. A process according to claim 100, further comprising
2	the step of:
3	receiving and storing voice data signals from said





individual callers responsive to voice signals provided to

5	said individual callers.
1	153 152 154-187. A process according to claim 186, further comprising
2	the step of:
3	subsequently processing said stored voice data
4	signals.
	154
1	154 HA188. A process according to claim 186, further comprising
2	the step of:
3	storing said digital identification data and said
4	answer data from said individual callers.
1	The said individual carrers. Se ISS ISS ISS. A process according to claim 100, wherein said
2	$\overline{\mathbb{S}}$ individual callers are further qualified by testing said
23/	participation numbers to determine whether said individual
31/2 H2	Callers are calling during a predetermined period of time.
	156 156 155 14190: A process according to claim 189, wherein a clock is
1	4196. A process according to claim 189, wherein a clock is
2	used to qualify said individual callers with respect to said
3	period of time.
	157
1	191. An analysis control system according to claim 100,
2	wherein said select operating format is accessed by a pay to dial
3	number identified by called number identification signals (DNIS)
4	and said another of said plurality of operating formats is

accessed by a number other than said pay to dial called number

6	identified by called number identification signals (DNIS).
1	158 Welge. A process according to claim 141, further comprising
2	the step of:
3	receiving and storing voice data signals from said
4	individual callers responsive to voice signals provided to
5	said individual callers.
1	159 158 158 159 158 159 159 159 159 159 159 159 159 159 159
2	the step of:
3	subsequently processing said stored voice data
4	signals.4
1	subsequently processing said stored voice data signals.4 160 158 tw194. A process according to claim 192, wherein said data
7	relating to calls from said individual callers includes said
/3	digital identification data and said answer data from said
4	individual callers.
1	relating to calls from said individual callers includes said digital identification data and said answer data from said individual callers. 161 79 12195. A process according to claim 121, wherein said individual callers are further qualified by testing said
2	individual callers are further qualified by testing said
3	participation numbers to determine whether said individual
4	callers are calling during a predetermined period of time.
1	162 161 162 162 161 162 161 162 161 161
2	used to qualify said individual callers with respect to said



3 period of time.

A process according to claim 196, wherein said by a use-rate calculator predetermined period of time is A process according to claim 149, further comprising 1 the step of: 2 receiving and storing voice data signals from said 3 individual callers responsive to voice signals provided to 4 said individual callers.4-2 5 A process according to claim 198, further comprising 1 2 the step of: subsequently processing stored voice data signals. 3 A process according to claim 198, wherein said data 1 relating to calls from said individual callers includes said digital identification data and said answer data from said individual callers. #201. A process according to claim 119, wherein said individual callers are further qualified by testing said 2 participation numbers to determine whether said individual 3 callers are calling during a predetermined period of time. 4 14202. A process according to claim 201, wherein a clock is 1 used to qualify said individual callers with respect to said 2 period of time.4 3

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1	H203.	An analysis control system according to class	lm 125;
2	wherein said	data relating to certain select ones of said	ì
3	individual ca	allers includes credit card number data.	
1	170 H-201.	An analysis control system according to class	169 im 203 ,
2		data relating to certain select ones of said	
3	individual ca	llers includes credit card expiration date o	lata.
1	171 4205.	An analysis control system according to class	169 im 203,
2	wherein said	credit card number data is tested against	
3		credit card numbers. +4>	
1 2	<u>केंद्र</u> े हैं ज्यांक	An analysis control system according to clair interface structure receives voice data which	
3 ,	stored for su	bsequent use. 4	
3/ H1		An analysis control system according to clai	
2		ast certain of said data developed by said r	emote
3	terminals and	at least certain of said voice data is used	l in
4	subsequent pr	ocessing. 4	
1	174 t 1 208.	An analysis control system according to clai	173 .m 207 ,
2	wherein said	subsequent processing includes isolating a s	ubset of
3	said individu	al callers.#	
			_

An analysis control system according to claim 127,

wherein said data relating to certain select ones of said individual callers includes credit card number data, which is tested by said qualification structure for entitlement.

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H210. An analysis control system according to claim 128,
wherein said identification data signals are further indicative
of caller billing identification data.

wherein said interface structure receives calling number identification data signals automatically provided by said communication facility, which are tested by said qualification structure with respect to a limit on use to determine if at least certain of said individual callers are entitled to access.

An analysis control system according to 141, wherein said individual callers provide caller PIN number data online for subsequent identification of said individual callers.

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623. An analysis control system according to claim 149,
wherein said caller personal identification data is PIN number
data. ##

tient. An analysis control system according to claim 150, wherein at least certain of said individual callers are transferred to an operator attended terminal and at least certain

of said data entered by said individual callers is displayed at said operator attended terminal.

with a telephone communication system, said process including the steps of:

providing key numbers specifying limits on use to entitle individual callers to access said operations of the interface with said telephone communications system;

coupling remote terminals to said interface for providing voice signals to said individual callers and generating said voice signals for actuating said remote terminals as to provide vocal operating instructions to specific ones of said individual callers;

receiving said key numbers providing digital identification data from said individual callers responsive to said voice signals and answer data provided from said remote terminals under control of said individual callers;

qualifying said individual callers by testing to determine if said individual callers are entitled to access said operations of the interface by testing said key numbers for said individual callers against stored key numbers to ensure their validity and testing said key numbers based on said limits on use for said individual callers and accordingly providing approval signals for qualified individual callers;

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24	accessing a memory with said key numbers for said
25	individual callers and storing data relating to calls from
26	said individual callers; and
27	processing at least certain of said answer data
28	responsive to said approval signals.
1	162 152. A process for controlling operations of an interface
2 H 3	with a telephone communication system according to claim 215, Numbers are where said key number is included in a packaging of a product.
1 2	183 183 184 181 181
3	wherein certain of said voice signals provided to said individual
4	callers indicate computer generated number data formed during
\ 5	operations of said interface.
2/2/	184 184 4218. A process for controlling operations of an interface 18/
2 43.	with a telephone communication system according to claim 215, numbers are where said key number is coded.
1	185 f^{4} 219. A process for controlling operations of an interface 181
2	with a telephone communication system according to claim 215,
3	wherein said processing step processes answer data to isolate a
4	subset of said individual callers.

220. A process for controlling operations of an interface

with a telephone communication system according to claim 215, wherein said individual callers provide credit card number data as additional digital identification data or said answer data, which is verified and stored in said memory.

with a telephone communication system according to claim 215, wherein said operations of the interface are in accordance with a select processing format of a plurality of processing formats identified by called terminal digital data signals (DNIS) provided automatically by said telephone communication system, further comprising the steps of:

providing access to said operations of the interface in accordance with said select processing format with a pay to dial number and providing access to said operations of the interface in accordance with another of said processing formats with a number other than said pay to dial number.

4222. A process for controlling operations of an interface with a telephone communications system, said process including the steps of:

providing products carrying key numbers for participation specifying limits on use to entitle individual callers to access said operations of the interface with said telephone communications system;

coupling remote terminals to said interface for

providing voice signals to said individual callers and generating said voice signals for actuating said remote terminals as to provide voice operating instructions to specific ones of said individual callers;

receiving digital identification data from said individual callers responsive to said voice signals including said key numbers for said individual callers and answer data provided from said remote terminals under control of said individual callers;

qualifying said individual callers by testing to determine if said individual callers are entitled to access said operations of the interface based on said limits on use specified by said key numbers for said individual callers and accordingly providing approval signals for qualified callers;

accessing a memory with said key numbers for said individual callers and storing data relating to calls from said individual callers; and

providing certain of said voice signals to said individual callers to indicate computer generated number data formed during operations of the interface.

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18223. A process according to claim 222, wherein said computer generated number data is stored in said memory.

(96) 189 4-224: A process according to claim 223, wherein said

	2	computer generated number data is stored in association with said
	3	digital identification data. $ u$
	1 2	191 /88 +225. A process according to claim 222, further comprising the step of:
ተ	3	providing said key numbers in a packaging of said
	4	products. #
	1 2	192 186 4226. A process according to claim 222, further comprising the step of:
	3	processing at least certain of said answer data to
	4	isolate a subset of callers. +*
		isolate a subset of callers. 44 193 1227. A process according to claim 222, wherein caller
		credit card number data is received from said individual callers
_	3 / ‡	as additional digital identification data or said answer data.
rt	3/ = 1	as additional digital identification data or said answer data.
	2	computer generated number data is indicative of a calling order
	3	sequence of said individual callers .
		195
	1	4229. An analysis control system for use with a
	2	communication facility including remote terminals for individual
	3	callers, wherein each of said remote terminals may comprise a
	4	conventional telephone instrument including voice communication



means and digital input means in the form of an array of

alphabetic numeric buttons for providing data, said analysis control system comprising:

interface structure coupled to said communication facility to interface said remote terminals for voice and digital communication and including means to provide signals representative of data developed by said remote terminals and including structure to control processing formats of said analysis control system in accordance with signals automatically provided by said communication facility indicative of one of a plurality of called numbers (DNIS) wherein said one of a plurality of called numbers identifies a select processing format from a plurality of processing formats;

voice generator structure selectively coupled through said interface structure to said remote terminals for providing vocal operating instructions to individual ones of said callers;

record memory connected to said interface structure for accessing a file and storing data relating to certain select ones of said individual callers including voice data and digital data developed by said remote terminals; and

analysis structure connected to said record memory for processing at least certain of said data relating to certain select ones of said individual callers to isolate a subset of said callers, wherein processing of said certain of said data includes accumulating multiple different personal

identifying data provided by said select ones of said 32 individual callers and considering said multiple different 33 data by logic comparisons to isolate said subset of said 34 callers. 35 195 An analysis control system according to claim 229, wherein certain of said caller data signals provided by said 1 individual callers are stored in said record structure. 2 An analysis control system according to claim 229, 1 analysis structure provides including wherein said individual designations include sequence data and *I*+ 2 other caller data. An analysis control system according to claim 229, 1 wherein said select processing format is accessed by a pay to dial called number received over a pay to dial network and identified by called number identification data signals (DNIS). An analysis control system according to claim 232, wherein at least one other of said processing formats is accessed 2 by a number other than said pay to dial called number and 3 identified by called number identification data signals (DNIS) 4 An analysis control system according to claim 233, 1

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further comprising:

qualification structure coupled to said interface

structure for qualifying at least certain of said individual callers for access to said select processing format by testing key numbers specifying a limit on use provided by said certain of said individual callers as part of said digital data developed by said remote terminals.

An analysis control system according to claim 234, wherein said digital data developed by remote terminals includes personal information data on at least said certain of said individual callers including age data.

REMARKS

This amendment is in response to the office action mailed on November 26, 1996. Claims 29-35, 37-73, 75-144, and 146-178 are pending, of which claims 29-35, 37-39, 55-73, 75-97, 100-118, 125-137, 149-156, 159-173, and 175-176 stand allowed, and all of the rest but for claim 174 are indicated to be allowable.

Applicant appreciates the Examiner's indication of allowance and allowability. To advance prosecution to issuance, Applicant has carefully studied all the claims and further refined them where necessary for clarity and to further distinguish the claims from the prior art of record. By this amendment, claims 29 (allowed), 32-33 (allowed), 37 (allowed), 39 (allowed), 41-42, 44, 46, 50 (allowed), 51, 58 (allowed), 63 (allowed), 68-70 (allowed), 79 (allowed), 82 (allowed), 88 (allowed), 91 (allowed), 96-97 (allowed), 98, 102 (allowed), 119, 122, 126 (allowed), 128

(allowed), 130-135 (allowed), 137 (allowed), 138, 141-143, 148, 149-151 (allowed), 155-156 (allowed), 157-158, 164 (allowed), and 166 (allowed) are amended. Also, by this amendment Applicant is submitting new claims 179-235, mostly dependent claims, for the Examiner's consideration. Reconsideration and allowance of this application is respectfully requested.

At the outset, in paragraph 1 of the office action, the Examiner noted that Applicant's statement with respect to claim 159 is not accurate. Applicant's statement with respect to claim 159 that it recites the combination of claim 37 (allowed) with further limitations was with reference to claim 37 of his parent application no. U.S. Serial No. 08/476,662, which issued as claim 24 in his parent patent no. 5,561,707.

Discussion of the Amendments to Overcome the Rejection Under 35
U.S.C. § 112 and to Correct Informalities Noted by the Examiner

In paragraph 3 of the office action, the Examiner rejected

claims 51-54, 98-99, 119-124, 136-144, 146-148, 157, 158, 174, 177, and 178 under 35 U.S.C. Section 112, second paragraph.

In particular, with respect to claim 51, the Examiner indicated that the recitation "said caller" lacks antecedent basis. To address the lack of antecedent basis, Applicant has amended claim 51 to now recite --a-- caller. With respect to claims 52 and 53, the Examiner finds that the recitation "said other data" lacks antecedence. The Examiner's attention is drawn to line 3 of parent claim 51, which recites "other data." With respect to the

Examiner's rejection of claim 98, the recitation "compare" has been amended to --represent--. With respect to claim 119, the recitation "said communication facility" has been amended to said --telephone-- communication facility, which has antecedence in its preamble. As for claim 138, Applicant has amended it to clarify that one of a plurality of called numbers identifies --one of-- a plurality of distinct operating formats. With respect to claim 141, Applicant has amended the recitation "analysis structure," to --analysis control system--. In claim 157, Applicant has amended it to clarify that the step of receiving --call data signals-- is referred to. With respect to duplicate claims 166 and 174, Applicant has amended claim 166 to depend on claim 165.

In paragraph 4 of the office action, the Examiner noted informalities in certain claims and requested correction of those informalities. In claim 119, Applicant has inserted "and," after the semicolon in line 29. In claims 130 and 131, Applicant has replaced "comprises" with --comprise--. In claim 137, Applicant has replaced "are" at line 2 with --is--. In claim 151, line 46, "is" is replaced with --being--.

Discussion Relating to Submission of a Terminal Disclaimer

In paragraph 6 of the office action, the Examiner has required that Applicant must file a terminal disclaimer, at least with respect to claims 40 and 41 among "many of the claims in the present application." Although the claims in this application,

are distinct and different in scope from Applicant's parent claims issued in his '739 patent, a terminal disclaimer is submitted with this amendment to expedite issuance of this application. As a matter of interest, it is noted that the Examiner finds claims 40 and 41 (and their dependent claims 42-49) of the present application similar to claims 1, 8, 11, 12, and 14 of Applicant's '739 patent, whereas Applicant notes that claim 1 recites a "consumable key," claim 11 recites "called terminal digital data" and "interrelated processing," and claims 12 and 14 recite "interrelated processing." The identified features are not claimed in present claims 40 and 41, nor in their dependent claims 42-49.

<u>Discussion of Applicant's Voluntary Amendments</u>

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Applicant has amended specific claims where necessary to further clarify them. In particular, claim 32 is amended to clarify that a specific format is identified --from a plurality of formats--. Claim 33 is amended to depend on claim 32. In claim 37, to address a lack of antecedence for the recitation "the calling order sequence," Applicant has amended it to recite --a-- calling order sequence.

Applicant has amended claim 41 to further clarify that at least certain of the answer data is processed and that it isolates a subset of callers based on repeated comparisons of answer data that is provided with answer data that is registered. Claims 44 and 46, which ultimately depend on claim 41 are amended

to be consistent with claim 41. Claim 42 is amended to address lack of antecedence for "the calling sequence" and to recite --a-- calling sequence.

In claim 50, Applicant noted a lack of antecedence for the recitation "calls from said individual callers," and has deleted "calls from." The remaining recitation has antecedence in the same claim. Also, with respect to claim 50, after the recitation "called number identification signals," Applicant has inserted --(DNIS)-- for clarification. Claim 55 is amended to recite --record-- means instead of "designation" means, which is more appropriate.

Claim 56 is further amended to clarify that the called number identification signals are --automatically provided by said communication facility-- and to further include the limitations of claims 80 and 82, that is a --switching structure-- for switching certain callers to live operators.

Accordingly, claims 80 and 81 are canceled, without prejudice.

Claim 58 is amended to recite credit card expiration --date--data. In Claim 63, the recitation "at least one of said two forms" is deleted. Claims 68, 69, and 70 are amended to depend on claim 56.

Claim 70 is also amended to recite consistent terminology with its parent claim. Claim 79 is further amended to recite that the --caller customer number is verified against a record of qualified customer numbers--. Claims 91, 97, 102, and 156 are amended to further clarify the existing recitations. Claims 110

and 158 are amended to recite that the calling number identification data is used for a test.

Claims 126, 135, and 150 are amended to recite call distributors in relation to the call allocation routing capability. Claim 128 is clarified where necessary and amended to further recite a qualification structure. Claim 131 is amended to also recite social security number data. In claim 132, the recitation caller customer number data is rearranged for clarity. Claim 133 is amended to acknowledge antecedence for additional data signals and claim 134 is amended to depend upon claim 132.

Claims 142 and 143 are amended to recite the alternative

--participation-- number data. Claim 144 is amended to depend on

claim 146 and to recite personal information data rather than

physical characteristic data. Claim 149 is amended to include

the limitation of DNIS for format selection. Claim 164 is

amended to recite calling number identification signals

automatically provided by the communication facility. Claim 166

is amended to depend on claim 165 rather than on claim 159.

Discussion of New Claims

New claims 179-235 are introduced for the Examiner's consideration. Claims 179-214 depend on the pending claims and recite further limitations in combination with their parent claims. In particular, claim 179 depends on claim 30, claim 180 depends on claim 31, claim 181 depends on claim 40, claims 182-

184 ultimately depend on claim 56, claim 185 depends on claim 65, claims 186-191 ultimately depend on claim 100, claims 192-197 ultimately depend on claim 111, claims 198-202 ultimately depend on claim 119, claims 203-208 ultimately depend on claim 125, claim 209 depends on claim 127, claim 210 depends on claim 128, claims 211-212 depend on claim 141, claim 213 depends on claim 149, and claim 214 depends on claim 150.

Applicant is introducing three independent claims 215, 222, Independent claim 215 is similar to issued claim 69 of Applicant's U.S. Patent No. 5,561,707, but for the differences that it recites (1) providing --key numbers--, rather than providing "products carrying participation numbers" and (2) in the qualifying step recites testing those key numbers against stored key numbers to ensure their validity and testing them based on limits on use. Claims 216-221 depend on claim 215 and recite further limitations. Independent claim 222 is again similar to issued claim 69 of Applicant's U.S. Patent No. 5,561,707 with differences in its recitation of --key numbers-rather than "participation numbers" and a step of --providing certain of said voice signals to said individual callers to indicate computer generated number data formed during operations of the interface -- instead of claim 69's processing step. Claims 223-228 depend on claim 222 and recite further limitations.

Independent claim 229 recites a combination of elements including (1) an interface structure coupled to said communication facility to interface remote terminals for voice

and digital communication and including means to provide signals representative of data developed by the remote terminals and including structure to control processing formats of the analysis control system in accordance with signals automatically provided by said communication facility indicative of one of a plurality of called numbers (DNIS) wherein said one of a plurality of called numbers identifies a select processing format from a plurality of processing formats; (2) voice generator structure selectively coupled through the interface structure to said remote terminals for providing vocal operating instructions to individual ones of said callers; (3) record memory connected to the interface structure for accessing a file and storing data relating to certain select ones of said individual callers including voice data and digital data developed by said remote terminals; and (4) analysis structure connected to the record memory for processing at least certain of said data relating to certain select ones of said individual callers to isolate a subset of said callers, wherein processing of said certain of the data includes accumulating multiple different personal identifying data provided by said select ones of said individual callers and considering the multiple different data by logic comparisons to isolate said subset of the callers. Claims 230-235 depend on claim 229 and recite further limitations.

Other Comments

In paragraph 9, the Examiner indicated his consideration of

the Information Disclosure Statement submitted by Applicant on October 22, 1996, which he had also considered during prosecution of Applicant's parent applications such as U.S. Application Serial No. 08/139,307 (now issued as U.S. Patent No. 5,561,707). To that end, Applicant wishes to clarify a comment made during prosecution of the same parent application with respect to U.S. Patent No. 4,706,275 to Kamil. To avoid any misinterpretation of Applicant's previous statement, Applicant's reiterates his position that the Kamil patent does not explicitly disclose a consumable key operation as disclosed by the Applicant. Although the Kamil patent does mention a valid ticket number and implies some form of a "pre-paid ticket" (Figure 2, block 51), it is vague in describing any ticket or product bearing any code or number indicating a limit on its use. Furthermore, the Kamil patent does not disclose prompting callers by voice to enter ET ET ET ET data.

SUMMARY

Favorable consideration and allowance of all the pending claims is respectfully requested.

Respectfully submitted,

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Docket No. 9002-1B670USE

(prev. 6646-101NF)

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